

DOCKET NO: 203828US



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
KOUICHI MATSUDA : EXAMINER: NGUYEN, C..
SERIAL NO: 09/714,637 :
RCE FILED: FEBRUARY 23, 2004 : GROUP ART UNIT: 2173
FOR: SHARED VIRTUAL SPACE :
CONVERSATION SUPPORT SYSTEM
USING VIRTUAL TELEPHONES

APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicants appeal the outstanding Final Rejection of November 10, 2004, finally rejecting each of pending claims 1-18, 20, and 21.

I. REAL PARTY IN INTEREST

The above-noted application is assigned to Sony Corporation, which is the real party in interest, having a place of business at Tokyo, Japan.

II. RELATED APPEALS AND INTERFERENCES

Applicant and Applicant's representative are not aware of any related appeals or interferences that will directly effect or be directly affected by or having a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-18, 20, and 21 are pending in this application and the rejection of each of Claims 1-18, 20, and 21 is being appealed.

No claims were added, but Claim 19 was cancelled without prejudice during prosecution of this application.

IV. STATUS OF AMENDMENTS

A Request for Reconsideration was filed subsequent to the non-final Office dated April 7, 2004. A Notice of Appeal was filed subsequent to the Final Office Action dated November 10, 2004. Accordingly, all previously filed Amendments have been considered by the Examiner and are reflected in the attached claims.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The applicants of the present invention recognized that a problem exists in the current art in that until the present invention there was not a conversation support method and system for supporting a plurality of users in having a virtual conversation in a shared virtual space using a virtual mobile telephone or a virtual public telephone. For example, in a virtual reality chat environment, a user who can not log on to the virtual reality space may want to communicate with an avatar representing another logged-in user. Alternatively, an avatar in the shared virtual reality space may want to communicate with another user who has not appeared in the virtual reality space at a predetermined time.

Accordingly, Claim 1 sets forth a conversation support system for supporting a plurality of users in having a virtual conversation in a shared virtual space built and provided on a computer network, which is generally supported by Figure 1 and the detailed description of Figure 1 on pages 31-37 of the specification.

In particular, Claim 1 recites enrolling means for enrolling an avatar of a logged-in user into the shared virtual space, which finds support, e.g., in Figure 2 and on page 38, line 15 to page 39, line 16 of the specification.

Further, Claim 1 recites imparting means for imparting a virtual mobile telephone to each avatar in the shared virtual space, the virtual mobile telephone being usable within the shared virtual space, which finds support, e.g., in Figure 5 and on page 42, line 22 to page 43, line 14 of the specification.

In addition, Claim 1 recites determination means for determining, in response to a call for a virtual mobile telephone, whether a calling party originated the call from a telephone in the shared virtual space, from a telephone in another virtual space, or from a telephone in a real world, which finds support, e.g., in Figures 5, 7, 8, and 13, AO server 23, steps S122, S131-S133 and on page 44, line 3 to page 45, line 2; page 49, lines 20-22; and page 51, lines 11-24 of the specification. See also Figure 14, steps S222 and S231-S233 and the discussion related thereto in the specification.

Further, Claim 1 recites connecting means for executing connection processing in accordance with the determination made by the determination means, which finds support, e.g., in Figure 13, AO server 23, S124-S126, and page 50, lines 4-13 of the specification.

Independent Claim 8 recites limitations analogous to the limitations recited in Claim 1 and is supported as set forth above for Claim 1.

Similarly, Claim 5 sets forth a conversation support system for supporting a plurality of users in having a virtual conversation in a shared virtual space built and provided on a computer network, which is generally supported by Figure 1 and the detailed description of Figure 1 on pages 31-37 of the specification. Claim 5 recites enrolling means for enrolling an avatar of a logged-in user into said shared virtual space, which is supported as set forth above for Claim 1. Claim 5 also recites imparting means for imparting a virtual public telephone

usable by any enrolled avatar to said shared virtual space at a predetermined place, which finds support, e.g., in Figures 6, 10, and 12, and page 43, lines 1-3; and page 47, line 19 to page 48, line 3. Claim 5 also recites determination means for determining, in response to a call to said virtual public telephone, whether a calling party originated said call from a telephone in said shared virtual space, from a telephone in another virtual space, or from a telephone in the real world; and connecting means for executing connection processing in accordance with the determination made by said determination means, which are generally supported as set forth above for the analogous limitations of Claim 1. See also page 48, 16-19.

Independent Claims 12 and 18 recite limitations analogous to the limitations recited in Claim 5 and are supported as set forth above for Claim 5.

Claim 15 is directed to a conversation support method for supporting an activity of an avatar in a shared virtual space built and provided on a computer network, which is generally supported by Figure 1 and the detailed description of Figure 1 on pages 31-37 of the specification. Claim 15 recites receiving a request for sending a message from said avatar, which finds support, e.g., in Figures 10 and 13 (S101-S104 and S121); and on page 46, lines 3-13 of the specification. In addition, Claim 15 recites determining whether a destination of said message exists in the real world, and executing connection processing in accordance with the determination made by the determining step, which are generally supported as set forth above for the analogous limitations of Claim 1.

Independent Claim 20 recites limitations analogous to the limitations recited in Claim 15 and is supported as set forth above for Claim 15.

Claims 17 sets forth a conversation support method for supporting an activity of an avatar in a shared virtual space built and provided on a computer network, which is generally supported by Figure 1 and the detailed description of Figure 1 on pages 31-37 of the

specification. Claim 17 recites receiving a request for sending a message from a telephone of a user in the real world through a public telephone network in the real world, wherein the user is not logged into the shared virtual space, which finds support, e.g., in Figure 14, S231-S233, and on page 52, lines 1-8. Claim 17 also recites determining whether a destination of said message exists in said shared virtual space, which finds support, e.g., in Figure 14, S221-S222, and on page 52, line 9 to page 53, line 6. In addition, Claim 17 recites that if said determining step determines that the destination of said message exists in said shared virtual space, sending said message to said avatar, which finds support, e.g., in Figure 14, S224-S225 and S212, and on page 53, lines 7-24.

Independent Claim 21 recites limitations analogous to the limitations recited in Claim 17 and is supported as set forth above for Claim 17.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection being appealed is whether the combined teachings of U.S. Patent No. 6,397,080 to Viktorsson et al. (hereinafter “the ‘080 patent”) and U.S. Patent No. 6,484,037 to Schmidt et al. (hereinafter “the ‘037 patent”) renders obvious the subject matter of Claims 1-18, 20, and 21 under 35 U.S.C. § 103(a).

VII. ARGUMENT

Claims 1-4 and 8-11

Regarding the rejection of Claim 1, the Office Action asserts that the ‘080 patent discloses everything in Claim 1 with the exception of the determination means, and relies on the ‘037 patent to remedy that deficiency.

The ‘080 patent is directed to a removable memory card that stores information about avatar characteristics for use in a virtual environment, making it possible to use avatars in

new applications such as on mobile telephones. In particular, as shown in Figure 1, the '080 patent discloses a system in which a Subscriber Identity Module (SIM) card 115 containing avatar information may be inserted into an access terminal, e.g., the mobile station 101, allowing a called station 103 to display an avatar based on the avatar information stored on the SIM card. The '080 patent discloses a system having the same functionality as caller ID, except that an icon representing the calling subscriber (instead of a phone number) is transferred and displayed on the mobile station of the called subscriber.¹ This is called "A-face" presentation by the '080 patent. However, Applicants respectfully submit that the '080 patent fails to disclose *imparting means for imparting a virtual mobile telephone to each avatar in a shared virtual space, the virtual mobile telephone being usable within the shared virtual space*. The '080 patent does not disclose imparting a virtual mobile telephone to an avatar in a shared virtual space. Rather, the '080 patent merely discloses displaying an avatar on the display screen of a mobile telephone. No virtual mobile telephones are disclosed by the '080 patent.² Moreover, as admitted in the Office Action, the '080 patent fails to disclose the *determination means* recited in Claim 1.

The '037 patent is directed to a method of establishing group calls in a wireless communication system. In particular, the '037 patent discloses a group call server supplying mobile terminals of a certain type with an indication of call type, so as to distinguish group calls from other types of calls. However, Applicants respectfully submit that the '037 patent fails to disclose imparting means for imparting a virtual mobile telephone to avatars in a shared virtual space. Moreover, Applicants respectfully submit that the subject matter of the '037 patent is unrelated to virtual reality processing. Accordingly, Applicants respectfully submit that the '037 patent fails to disclose the determination means for determining, in response to a call to a virtual mobile telephone, whether a calling party originated the call

¹ See '080 patent, col. 3, lines 17-26.

² In this regard, Applicants note that the Final Office Action dated November 10, 2004, does not specifically identify an element disclosed by the '080 patent that corresponds to the claimed virtual mobile telephone.

from a telephone in a shared virtual space, from a telephone in another virtual space, or from a telephone in the real world, as recited in Claim 1. The '037 patent is silent as to whether a calling party originated a call from a telephone in a shared virtual space. Since the '037 patent fails to disclose anything related to virtual environments, it is unclear to Applicant how the '037 patent can be relied upon as disclosing whether the origin of a call is from within or from outside a virtual environment, as recited in Claim 1.

Thus, no matter how the teachings of the '080 and '037 patents are combined, the combination does not teach or suggest (1) imparting means for imparting a virtual mobile telephone to each avatar in a shared virtual space; and (2) determination means for determining, in response to a call to a virtual mobile telephone, whether a calling party originated the call from a telephone in the shared virtual space, a telephone in another virtual space, or from a telephone in the real world, as recited in Claim 1. Moreover, since neither reference discloses the claimed determination means, both references must also fail to disclose the connecting means recited in Claim 1. Accordingly, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claim 1 (and dependent Claims 2-4) should be withdrawn.

Claim 8 recites limitations analogous to the limitations recited in Claim 1. Accordingly, for the reasons stated above for the patentability of Claim 1, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claim 8 (and dependent Claims 9-11) should be withdrawn.

Claims 5-7, 12-14, and 18

Claim 5 is directed to a conversation support system for supporting a plurality of users in having a virtual conversation in a shared virtual space built and provided on a computer network, comprising, *inter alia*: (1) enrolling means for enrolling an avatar of a logged-in

user into the shared virtual space; (2) imparting means for imparting a virtual public telephone usable by any enrolled avatar to the shared virtual space at a predetermined place; (3) determination means for determining, in response to a call to the virtual public telephone, whether a calling party originated the call from a telephone in the shared virtual space, from a telephone in another virtual space, or from a telephone in the real world.

Applicants respectfully submit that the '080 patent fails to disclose imparting means for imparting a virtual public telephone usable by any enrolled avatar to the shared virtual space at a predetermined place. As discussed above, the '080 patent is silent regarding any virtual telephone, whether mobile or public telephone, in a shared virtual space. Further, as admitted in the Office Action, the '080 patent fails to disclose the determination means recited in Claim 5.

As discussed above, the '037 patent fails to disclose a shared virtual space, and thus must necessarily fail to disclose the imparting means and determination means recited in Claim 1.

Thus, no matter how the teachings of the '080 and '037 patents are combined, the combination does not teach or suggest the imparting means, determination means, and connecting means recited in Claim 5. Accordingly, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claim 5 (and dependent Claims 6 and 7) should be withdrawn.

Claims 12 and 18 recite limitations analogous to the limitations recited in Claim 5. Accordingly, for the reasons stated above for the patentability of Claim 5, Applicants respectfully submit that the rejections of Claim 12 (and dependent Claims 13 and 14) and Claim 18 should be withdrawn.

Claims 15, 16, and 20

Claim 15 is directed to a conversation support method for supporting an activity of an avatar in a shared virtual space built and provided on a computer network, comprising: (1) receiving a request for sending a message from the avatar; (2) determining whether a destination of the message exists in the real world; and (3) executing connection processing in accordance with the determination made by the determining step.

Applicants respectfully submit that no matter how the teachings of the '080 and '037 patents are combined, the combination does not teach or suggest (1) receiving a request for sending a message from an avatar; and (2) determining whether a destination of the message exists in the real world, as recited in Claim 15. In particular, Applicants submit that the '080 patent fails to disclose that the functionality of the avatar shown in Figure 1 of the '080 patent includes requesting the sending of a message. Rather, the '080 patent merely discloses that an avatar is displayed on a called mobile phone. Moreover, as discussed above, the '080 and '037 patents, taken either singly or in proper combination, fail to disclose determining whether a destination of the message, which was requested to be sent by an avatar, exists in the real world, as recited in Claim 15. Accordingly, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and the rejection of Claim 15 (and dependent Claim 16) should be withdrawn.

Claim 20 recites limitations analogous to the limitations recited in Claim 15. Accordingly, for the reasons stated above for the patentability in Claim 15, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claim 20 should be withdrawn.

Claims 17 and 21

Claim 17 is directed to a conversation support method for supporting an activity of an avatar in a shared virtual space built and provided on a computer network, comprising: (1)

receiving a request for sending a message from a telephone of a user in the real world to a public telephone network in the real world, wherein the user is not logged into the shared virtual space; (2) determining whether a destination of the message exists in the shared virtual space; and (3) if the determining step determines that the destination of the message exists in the shared virtual space, sending the message to the avatar.

Applicants respectfully submit that, no matter how the teachings of the '080 and '037 patents are combined, the combination does not teach or suggest determining whether a destination of a message, wherein the request for sending the message originated from a telephone of a user in the real world, exists in a shared virtual space. The '080 and '037 patents do not disclose determining whether a destination of a message exists in a shared virtual space. Accordingly, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claim 17 should be withdrawn.

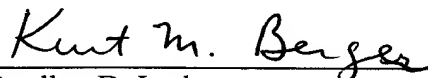
Claim 21 recites limitations analogous to the limitations recited in Claim 17. Accordingly, for the reasons stated above for the patentability of Claim 17, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claim 21 should be withdrawn.

VIII. CONCLUSION

For the foregoing reasons, Applicant respectfully submits that each of claims 1-18, 20, and 21 patentably distinguishes over the combination of teachings of the '080 and '037 patents. Therefore, the outstanding rejections must be REVERSED.

Respectfully submitted,

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CLAIMS APPENDIX

1. (Rejected) A conversation support system for supporting a plurality of users in having a virtual conversation in a shared virtual space built and provided on a computer network, comprising:

enrolling means for enrolling an avatar of a logged-in user into said shared virtual space;

imparting means for imparting a virtual mobile telephone to each avatar in said shared virtual space, said virtual mobile telephone being usable within said shared virtual space;

determination means for determining, in response to a call to a virtual mobile telephone, whether a calling party originated said call from a telephone in said shared virtual space, (2) from a telephone in another virtual space, or (3) from a telephone in the real world; and

connecting means for executing connection processing in accordance with the determination made by said determination means.

2. (Rejected) The conversation support system according to claim 1, wherein, if the determination means determines that said calling party originated said call from said telephone in the real world, said connecting means establishes a connection with said calling party through a public telephone network in the real world or executes message transfer.

3. (Rejected) The conversation support system according to claim 1, wherein, if the determination means determines that said calling party originated said call from said telephone in said another virtual space, said connecting means establishes a connection with said telephone in said another virtual space or executes message transfer.

4. (Rejected) The conversation support system according to claim 1, wherein said connecting means receives said call from said telephone in the real world or a virtual telephone in said another virtual space and connects the received call to a virtual mobile telephone of a called avatar in said shared virtual space.

5. (Rejected) A conversation support system for supporting a plurality of users in having a virtual conversation in a shared virtual space built and provided on a computer network, comprising:

enrolling means for enrolling an avatar of a logged-in user into said shared virtual space;

imparting means for imparting a virtual public telephone usable by any enrolled avatar to said shared virtual space at a predetermined place;

determination means for determining, in response to a call to said virtual public telephone, whether a calling party originated said call (1) from a telephone in said shared virtual space, (2) from a telephone in another virtual space, or (3) from a telephone in the real world; and

connecting means for executing connection processing in accordance with the determination made by said determination means.

6. (Rejected) The conversation support system according to claim 5, wherein, if the determination means determines that said calling party originated said call from said telephone in the real world, said connecting means establishes a connection with said calling party through a public telephone network in the real world or executes message transfer.

7. (Rejected) The conversation support system according to claim 5, wherein, if the determination means determines that said caller originated said call from said telephone in said another virtual space, said connecting means establishes a connection with said telephone in said another virtual space or executes message transfer.

8. (Rejected) A conversation support method for supporting a plurality of users in having a virtual conversation in a shared virtual space built and provided on a computer network, comprising:

enrolling an avatar of a logged-in user into said shared virtual space;

imparting a virtual mobile telephone to each avatar in said shared virtual space, said virtual mobile telephone being usable within said shared virtual space;

determining, in response to a call to a virtual mobile telephone, whether a calling party originated said call from a telephone in said shared virtual space, (2) from a telephone in another virtual space, or (3) from a telephone in the real world; and

executing connection processing in accordance with the determination made in said determination step.

9. (Rejected) The conversation support method according to claim 8, wherein, if the determining step determines that said calling party originated said call from said telephone in the real world, said connecting step establishes a connection with said calling party through a public telephone network in the real world or executes message transfer.

10. (Rejected) The conversation support method according to claim 8, wherein, if said determining step determines that said calling party originated said call from said

telephone in said another virtual space, said connecting step establishes a connection with said telephone in said another virtual space or executes message transfer.

11. (Rejected) The conversation support method according to claim 8, further comprising:

receiving a call from said telephone in the real world or said telephone in said another virtual space;

determining whether said call is directed to an avatar existing in said shared virtual space; and

if said determining step determines that said call is directed to said avatar existing in said shared virtual space, connecting said call to a virtual telephone of said avatar.

12. (Rejected) A conversation support method for supporting a plurality of users in having a virtual conversation in a shared virtual space built and provided on a computer network, comprising:

enrolling an avatar of a logged-in user into said shared virtual space;

imparting a virtual public telephone usable by any enrolled avatar to said shared virtual space at a predetermined place;

determining, in response to a call to said virtual public telephone, whether a calling party originated said call from a telephone in said shared virtual space, (2) from a telephone in another virtual space, or (3) from a telephone in the real world; and

executing connection processing in accordance with the determination made in said determination step.

13. (Rejected) The conversation support method according to claim 12, wherein, if the determining step determines that said calling party originated said call from said telephone in the real world, said connecting step establishes a connection with said calling party through a public telephone network in the real world or executes message transfer.

14. (Rejected) The conversation support method according to claim 12, wherein, if the determining step determines that said calling party originated said call from said telephone in said another virtual space, said connecting step establishes a connection with said telephone in said another virtual space or executes message transfer.

15. (Rejected) A conversation support method for supporting an activity of an avatar in a shared virtual space built and provided on a computer network, comprising:

receiving a request for sending a message from said avatar;
determining whether a destination of said message exists in the real world; and
executing connection processing in accordance with the determination made by the determining step.

16. (Rejected) The conversation support method according to claim 15, wherein, if said destination of said message is found in the real world, said step of executing connection processing establishes a connection with said destination through a public telephone network in the real world or executes message transfer.

17. (Rejected) A conversation support method for supporting an activity of an avatar in a shared virtual space built and provided on a computer network, comprising:

receiving a request for sending a message from a telephone of a user in the real world through a public telephone network in the real world, wherein the user is not logged into the shared virtual space;

determining whether a destination of said message exists in said shared virtual space;
and

if said determining step determines that the destination of said message exists in said shared virtual space, sending said message to said avatar.

18. (Rejected) A program storage medium storing a computer program in a computer-readable form for executing processing on a computer system to support a virtual conversation in which a plurality of users can participate in a shared virtual space built and provided on a computer network, said computer program comprising the steps of:

enrolling an avatar of a logged-in user into said shared virtual space;
imparting a virtual public telephone usable by any enrolled avatar to said shared virtual space at a predetermined place;

determining, in response to a call to said virtual public telephone, whether a calling party originated said call from a telephone in said shared virtual space, (2) from a telephone in another virtual space, or (3) from a telephone in the real world; and

executing connection processing in accordance with the determination made in said determination step.

19. (Cancelled)

20. (Rejected) A program storage medium storing a computer program in a computer readable form for executing processing on a computer system to support a virtual

conversation in which a plurality of users can participate in a shared virtual space built and provided on a computer network, said computer program comprising the steps of:

receiving a request for sending a message from said avatar;
determining whether a destination of said message exists in the real world; and
executing connection processing in accordance with the determination made in the determining step.

21. (Rejected) A program storage medium storing a computer program in a computer readable form for executing processing on a computer system to support a virtual conversation in which a plurality of users can participate in a shared virtual space built and provided on a computer network, said computer program comprising the steps of:

receiving a request for sending a message from a telephone of a user in the real world through a public telephone network in the real world, wherein the user is not logged into the shared virtual space;

determining whether a destination of said message exists in said shared virtual space;
and

if said determining step determines that the destination of said message exists in said shared virtual space, sending said message to an avatar.

EVIDENCE APPENDIX

None

RELATED PROCEEDING APPENDIX

None